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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,814	04/19/2001	Shinji Tanaka	1139-01	6169
35811	7590	05/04/2005	EXAMINER	
IP GROUP OF DLA PIPER RUDNICK GRAY CARY US LLP			THORNTON, YVETTE C	
1650 MARKET ST			ART UNIT	
SUITE 4900			PAPER NUMBER	
PHILADELPHIA, PA 19103			1752	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/807,814

Applicant(s)

TANAKA ET AL.

Examiner

Yvette C. Thornton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This is written in reference to application number 09/807,814 filed on April 19, 2001 is a 371 of PCT/JP00/05911 filed on August 31, 2000.

Request for Continued Examination (RCE)

1. The request filed on February 23, 2005 for a Request for Continued Examination (RCE) under 37 CFR 1.53(d) based on parent Application No. 09/807,814 is acceptable and a RCE has been established. An action on the RCE follows.

Response to Amendment

2. Claim 3 has been cancelled. Claims 1-2 and 4-11 are currently pending.

Claim Rejections - 35 USC § 112-1st paragraph

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-2 and 4-11 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a peel strength of 0.5-2.0 g/cm, does not reasonably provide enablement for a peeling strength in the claimed range without a film stripping layer. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. The specification clearly teaches that, "[t]he degree how the film stripping layer facilitates the peeling off of the film can be expressed by the peel strength on peeling off the film" (pg. 30, 3rd paragraph). It leads the examiner to believe that the taught peel strength is directly related to the presence of the said stripping film. The examiner has found no teachings to a peeling strength absent the stripping layer.

Claim Rejections - 35 USC § 112-2nd paragraph

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

6. Claims 1-2 and 4-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The examiner is unclear as to what the applicant is claiming as his invention. The claims as written pertain to a printing plate material comprising a support, a photosensitive resin layer, an optical changing layer and a peelable thermoplastic film layer interposed between the resin layer and the optical density changing layer wherein the plate material has a peel strength of 0.5-2.0 g/cm. As discussed above, the specification does not provide support for such a peel strength absent a film stripping layer. The examiner is unclear if the applicant is intending to claim that a film stripping layer be present in the claim material. Clarification is requested.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-2, 4-5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Fan et al. (US 5262275 A) with Sonia et al. (US 3,622,659 A) and Solms et al. (US 2002/00658773) cited to teach inherent properties. Fan exemplifies photosensitive element having a layer, which is sensitive to IR radiation and two types of barrier layers. An IR sensitive layer was obtained by using an IR-sensitive UV opaque film having a support. A photopolymerization layer was obtained by using a CYREL 107 PLS+ printing element. In the printing element, the photopolymerizable layer (i.e., photosensitive layer) is overcoated with an elastomeric layer which functions as one barrier layer (film stripping layer) and is further overcoated with a polyamide release layer which functions as the second barrier layer (c. 11, l. 45-61). A sheet of IR sensitive UV opaque film was sprayed with a mixture of methanol and ethanol to

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soften the coating. The CYREL coversheet was removed and the softened coating side of the IR sensitive film was placed on top of the release layer. This was laminated at room temperature to squeeze out the excess solvent. The IR support was then removed from the IR sensitive layer and the element was dried. The density of the IR sensitive layer was increased by laminating additional IR sensitive films, with the coating softened onto the element four more times (c. 11, l. 62-c. 12, l. 5). Example 4 illustrates an IR layer, which is used with a single barrier layer, which is completely removed in the developer solvent. SBS, a styrene-butadiene-styrene block copolymer was pre-compounded with carbon black. An IR sensitive composition was prepared by dispersing and dissolving SBS-10phr carbon black; a tetrapolymer of methylmethacrylate/acrylonitrile/ butadiene/styrene; and butyrate hydroxy toluene in methylene chloride. The coversheet was removed from a CYREL printing element and the IR sensitive composition was coated onto the release layer of the CYREL plate, which functioned as a barrier layer (i.e., film layer). The taugt element of example 4 was then laser ablated. After imagewise ablating the IR sensitive layer, the element was exposed with a CYREL 3040 light source and developed. In the development step, the black and barrier layer are completely removed along with the unexposed areas of the photopolymerizable layer. An image with good relief highlight dots was obtained (c. 12, l. 60-c. 13, l. 30).

Although Fan fails to explicitly discuss the material of the barrier layer, he does teach that the layer is completely removed in the developer solvent (i.e., first type). Fan further discloses that materials, which are suitable as the first type of barrier layer includes polyamides, polyvinyl alcohol and hydroxyalkyl cellulose (c. 4, l. 65-c. 5, l. 3). Polyamide is well known in the art as a thermoplastic material (Sonia c. 4, l. 70-c. 5, l. 6) and would readily be "peelable", thereby meeting the limitations of instant claims 1-2 and 4-5. The examiner further takes the position that a material meeting the limitations of the said claims would inherently possess a peel strength within the claimed range.

Fan teaches that photopolymerization layer can vary over a wide range depending on the type of printing plate desired. Thin plates range from 20-50 mil (508-1270 μm), while thicker plates range from 100-250 mil (c. 4, l. 4-10). The barrier layers generally will have a thickness of 0.01-3 mils (0.25-76 μm) (c. 5, l. 44-51). Any conventional sources of actinic radiation may be used to polymerize the photopolymerizable layer. The most suitable source is a standard SYLVANIA 350 black light fluorescent lamp, which has a central wavelength of 354 nm (c. 9, l. 43-53).

It is the examiner's position that the CYREL printing element meets the limitations of the claimed support, photosensitive layer and film layer. The taught IR sensitive composition of example 4 meets the limitations of the claimed optical density changing layer wherein styrene-butadiene-styrene meets the limitations of a heat decomposable compound and carbon black meets the limitations of a light to heat converting substance. Although Fan fails to explicitly discuss optical density and evaporate or discoloration, it is the examiner's position that a composition comprising the taught components would readily have a change in optical density before and after exposure. Furthermore, it is well known and conventional in the art that carbon black discolors on exposure to energetic radiation (see SOLMS p. 0006).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fan et al. (US 5262275 A) with Sonia et al. (US 3,622,659 A) and Solms et al. (US 2002/00658773) as applied to claims 1-2, 4-5 and 7 above, and further in view of Kempf (US 4,859,551 A). Fan teaches all the limitations of the instant claims except it fails to teach and/or suggest the materials of instant claim 10 as suitable material

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for the taught barrier layers. Fan does however teach that those materials that are conventionally used as release layer in flexographic printing elements are suitable as the first type of barrier layer (c. 4, l. 65-c. 5, l. 3). One of ordinary skill in the art would have been motivated to use any material, which is conventional used in the art as a release layer. Kempf teaches a process wherein a release layer is polyethylene or polypropylene (cl. 36 and 38).

Response to Arguments

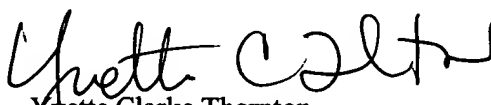
11. Applicant's arguments with respect to the instant claims have been considered but are of little moment in view of the new ground(s) of rejection.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvette C. Thornton whose telephone number is 571-272-1336. The examiner can normally be reached on Monday-Thursday 8-6:30.

13. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Yvette Clarke Thornton
Primary Examiner
Art Unit 1752

yct
May 2, 2005